and ten amino acid residues, inclusive, said peptide being an analog of one of the following naturally occurring peptides terminating at the carboxy-terminus with a Met residue: (a) litorin; (b) the ten amino acid carboxy-terminal region of mammalian gastrin releasing peptide; and (c) the ten amino acid carboxy-terminal region of amphibian bombesin; said therapeutic peptide being of the formula:

$$R_1$$
 $A^0-A^1-A^2-Trp-A^4-A^5-A^6-A^7-W$ 
 $R_2$ 

wherein

- $A^0$  = Gly, Nle,  $\alpha$ -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO<sub>2</sub>, OH, H or CH<sub>3</sub>), Trp, Cys, or  $\beta$ -Nal, or is deleted;
- $A^1$  = the D or L-isomer of any of pGlu, Nle, or  $\alpha$ -aminobutyric acid, or the D-isomer of any cf Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO<sub>2</sub>, OH, H or CH<sub>3</sub>), F<sub>5</sub>-Phe, Trp, Cys, or  $\beta$ -Nal, or is deleted;
- $A^2$  = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO<sub>2</sub>, OH, H or CH<sub>3</sub>), Trp, Cys,  $\beta$ -Nal, His, 1-methyl-His, or 3-methyl-His;
- $A^4$  = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle,  $\alpha$ -aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO<sub>2</sub>, OH, H or CH<sub>3</sub>), Trp, Cys, or  $\beta$ -Nal;

- $A^5 = Gln$ , Asn, Gly, Ala, Leu, Ile, Nle,  $\alpha$ -aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH<sub>3</sub>), Trp, Thr, or  $\beta$ -Nal;
- $A^6$  = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO<sub>2</sub>, OH, H or CH<sub>3</sub>), Trp, Cys, or  $\beta$ -Nal;

 $A^7 = 1$ -methyl-His, 3-methyl-His, or His; provided that, if  $A^0$  is present,  $A^1$  cannot be pGlu; further provided that, if  $A^0$  or  $A^1$  is present,  $A^2$  cannot be pGlu; further provided that, when  $A^0$  is deleted and  $A^1$  is pGlu,  $R_1$  must be H and  $R_2$  must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

(I): 
$$Z_1 & O \\ & & \parallel \\ -NH-CH-R_3-C-V,$$

wherein  $R_3$  is  $CHR_{20}-(CH_2)_{n1}$  (where  $R_{20}$  is either of H or OH; and nl is either of 1 or 0), or is deleted, and  $Z_1$  is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO<sub>2</sub>, OH, or CH<sub>3</sub>),  $F_5$ -Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or  $\beta$ -nal; and V is either  $OR_4$ , or

where  $R_4$  is any of  $C_{1-20}$  alkyl,  $C_{3-20}$  alkenyl,  $C_{3-20}$  alkinyl, phenyl, naphthyl, or  $C_{7-10}$  phenylalkyl, and each  $R_5$ , and  $R_6$ , independently, is any of H,  $C_{1-12}$  alkyl,  $C_{7-10}$  phenylalkyl, lower acyl, or,

where  $R_{22}$  is any of H,  $C_{1-12}$  alkyl,  $C_{7-10}$  phenylalkyl, or lower acyl; provided that, when one of  $R_5$  or  $R_6$  is  $-NHR_{22}$ , the other is H;

(II):

$$Z_4Z_1 \circ Z_2$$
 $| | | | |$ 
 $-N-CH-C-N$ 

wherein  $Z_1$  is the identifying group of any one of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu,  $\beta$ -Nal, Gln, p-X-Phe

(where X = H, F, Cl, Br, NO<sub>2</sub>, OH or CH<sub>3</sub>), F<sub>5</sub>-Phe, Trp, Cys, Met, Pro, or HyPro; and each  $Z_2$ ,  $Z_3$ , and  $Z_4$ , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or



(III):

wherein each  $Z_{20}$  and  $Z_{30}$ , independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of  $Z_{20}$  or  $Z_{30}$  is other than H,  $A^7$  is His,  $A^6$  is Gly,  $A^5$  is Val,  $A^4$  is Ala,  $A^2$  is His, and either of  $R_1$  or  $R_2$  is other than H,  $A^1$  must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each  $R_1$  and  $R_2$ , independently, is H,  $C_{1-12}$  alkyl,  $C_{7-10}$  phenylalkyl,  $COE_1$  (where  $E_1$  is  $C_{1-20}$  alkyl,  $C_{3-20}$  alkenyl,  $C_{3-20}$  alkinyl, phenyl, naphthyl, or  $C_{7-10}$  phenylalkyl), or lower acyl, and  $R_1$  and  $R_2$  are bonded to the N-terminal amino acid of said peptide, and further provided that when one of  $R_1$  or  $R_2$  is  $COE_1$ , the other must be H, or a pharmaceutically acceptable salt thereof.

The therapeutic peptide of claim 1 wherein

 $A^0 = Gly$ , D-Phe, or is deleted;

 $A^1 = p-Glu$ , D-Phe, D-Ala, D-B-Nal, D-Cpa, or D-Asn;

 $A^2 = Gln$ , His, 1-methyl-His, or 3-methyl-His;

 $A^4 = Ala;$ 

 $A^5 = Val;$ 

 $A^6 = Sar, Gly, D-Phe, or D-Ala;$ 

 $A^7 = His;$ 

and, where W is (I) and  $R_3$  is  $CH_2$  or  $CH_2-CH_2$ ,  $Z_1$  is the identifying group of Leu or Phe, where W is (I) and  $R_3$  is CHOH- $CH_2$ ,  $Z_1$  is the identifying group of Leu, cyclohexyl-Ala, or Phe and each  $R_5$  and  $R_6$  is H; and where W is (I), V is NHR<sub>6</sub>, and  $R_6$  is NH<sub>2</sub>; where W is (II ),  $Z_1$  is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO<sub>2</sub>, OH or  $CH_3$ ); and each  $Z_2$ ,  $Z_3$  and  $Z_4$ , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each  $Z_{20}$  and  $Z_{30}$ , is H; and each  $R_1$  and  $R_2$ , independently, is H, lower alkyl, or lower acyl.

- 3. The therapeutic peptide of claim 2 of the formula: D=Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.
- 4. The therapeutic peptide of claim 2 of the formula: p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

5. The therapeutic peptide of claim 2 of the formula:

D-Cpa-Gln-Trp-Ala-Val-Gly-His-B-Leu-NH2.

- 6. The peptide of claim  $_1$  wherein W is (I), V is  $OR_4$ , and  $R_4$  is any of  $C_{1-20}$  alkyl,  $C_{3-20}$  alkenyl,  $C_{3-20}$  alkinyl, phenyl, naphthyl, or  $C_{7-10}$  phenylalkyl, and  $A^6$  is N-methyl-D-Ala or  $A^1$  is D-F<sub>5</sub>-Phe.
- 7. The therapeutic peptide of claim 6 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

8. The therapeutic peptide of claim 2 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-ß-Leu-NH2.